

Digital Micro-measure Camera

BW1008 Series

User Manual

BW1008 Series Digital Micro-measure camera is a slim type handy tool.

It can easily use in different fields:

1. Skin inspection
2. Hair inspection
3. Industrial inspection: PCB, Material...
4. Education purpose
5. Print Industrial
6. Textile industrial
7. Biological inspection
8. Jewellery & Stamp(Collections) inspection
9. Others

BW1008 Series digital micro-measure camera is designed for PC solution with friendly user interface. The special AP software: Micro-Measure-Tool can support you to have picture, record video and do micro-measure work with ease.

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Specification

Image Sensor	Color CMOS Sensor
Controller	High Speed DSP(Driver Free available)
Lens	Micro-Scope Lens , M12
Focus Range	5mm ~ 250mm
Snap Shot	Software and Hardware
Video Capture Resolution	1600*1200,1280*1024, 800*600,640*480 352*288,320*240,176*144
Light Source	In-built White Light LED x8 PCS
Still Image Capture Resolution	5M, 3M , 2M , 1.3M , VGA
Frame Rate	30 f/s Under 600 LUX Brightness (1.3M)
Digital Zoom	4X Sequence Mode
Brightness Control	Manual adjustment , Auto W/B by software
Magnification Ratio	5 X ~ 500X (Manual)
Power Supply	USB Port (5V DC)
Interface	USB 2.0
Operation System	Win XP , Vista , Win 7 32 bit and 64 bit.
Driver Language	English, Chinese, German, Italy, French, Spain, Portugal, Japan
Measure Tool	Micro-Measure(It can measure Length and diameters, angle, the perimeter, area, etc) (Language: English, Chinese Simplified)
System Requirement	Pentium Computer with 700M Hz & Above , 1G HD Space CD ROM Driver, 64MB RAM , Direct X VGA Card
CD disk	Driver and Micro-Measure Tool
Fix Stand	All view angle available fix stand
Dimension	117 mm (L) X 33 mm (R)
Weight	532g



Notes before use

1. Don't touch lens & LED light area.
2. Don't de-assembly the digital Micro-measure camera , it cause damage.
3. Don't use it under high humidity environment.
4. Depart the USB port when un-use.
5. Clean out case with dry cloth.
6. Keep away from oil and floating materials, it causes lens contamination.
7. Avoid outdoor use if possible.
8. Storage: Temperature :0℃ ~ 40℃, Humidity:45% ~ 85%.
9. When this product get wet: leave PC connection immediately. And do not de-assembly or dry by hair dryer. Send to repair center.

Outlook & Standard parts

1. Digital Micro-measure Camera
2. USB 2.0 cable
3. Flexible Stand
4. CD ROM
5. User Guide

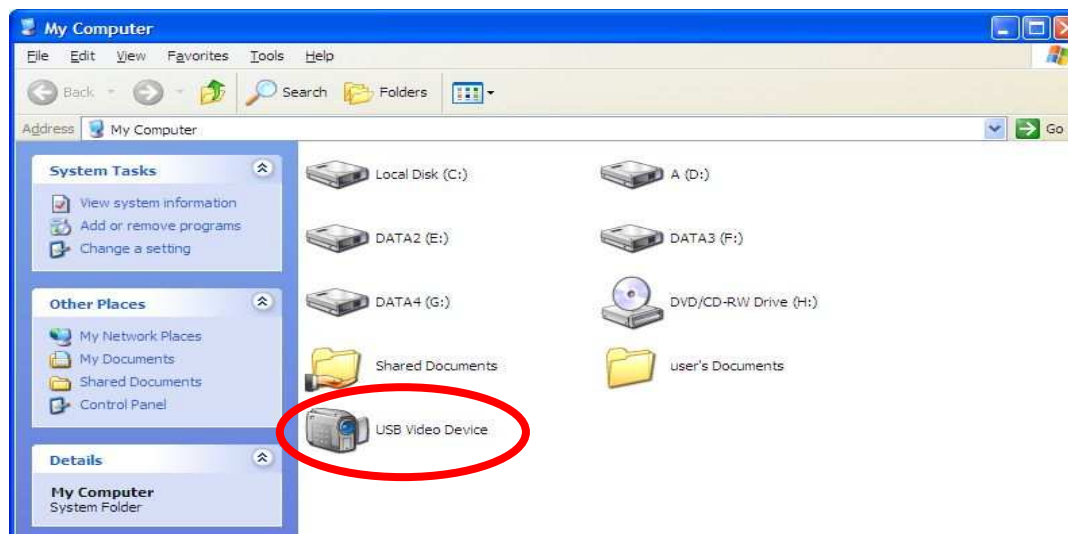
Hardware system requirements

- Windows XP、 VISTA、 WIN 7
- Pentium 1G, Celeron, AMD 1G & above
- 128MB Memory
- 150MB Hard Disc memory space
- 16-bit & above VGA Card
- CD-ROM
- USB2.0 interface

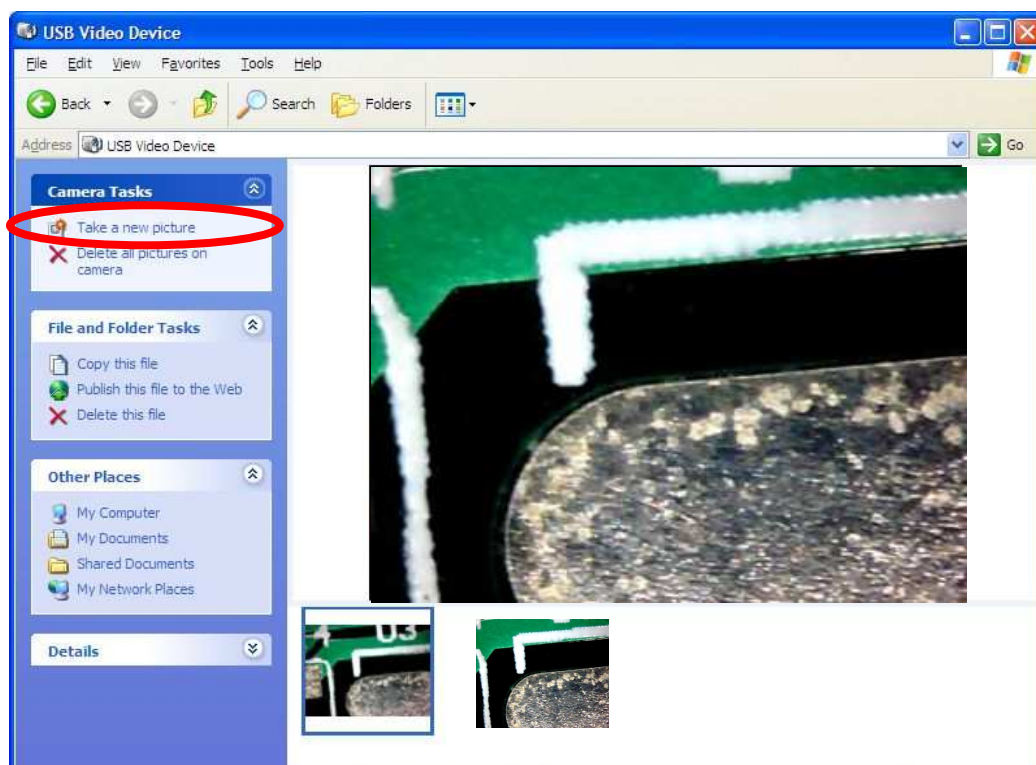
BW1008 Series Driver Free Mode

! **NOTE :** If your OS is VISTA or WIN 7 standard version, it is important for you to make sure the pre-view program “CamApp “ is ready before run “ Driver Free” function. We prepare it also inside our CD ROM , You can install the driver and get it ready before use.

1. Plug-in the USB port of Digital Micro-measure Camera into Computer USB port, Find USB Video Device in “ My Computer “.



2. Take pictures



BW1008 Series Driver Enhanced Mode

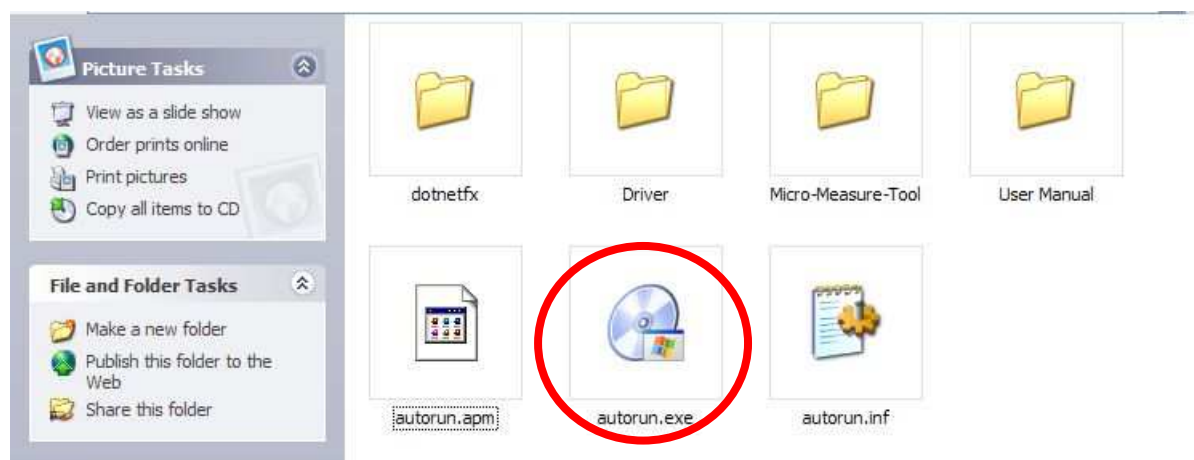
1. Plug-in USB port of Digital Micro-measure camera into Computer USB port



2. Insert CD ROM, system will auto come out the interface as bellowing, Click "BW1008-500X" to start installation



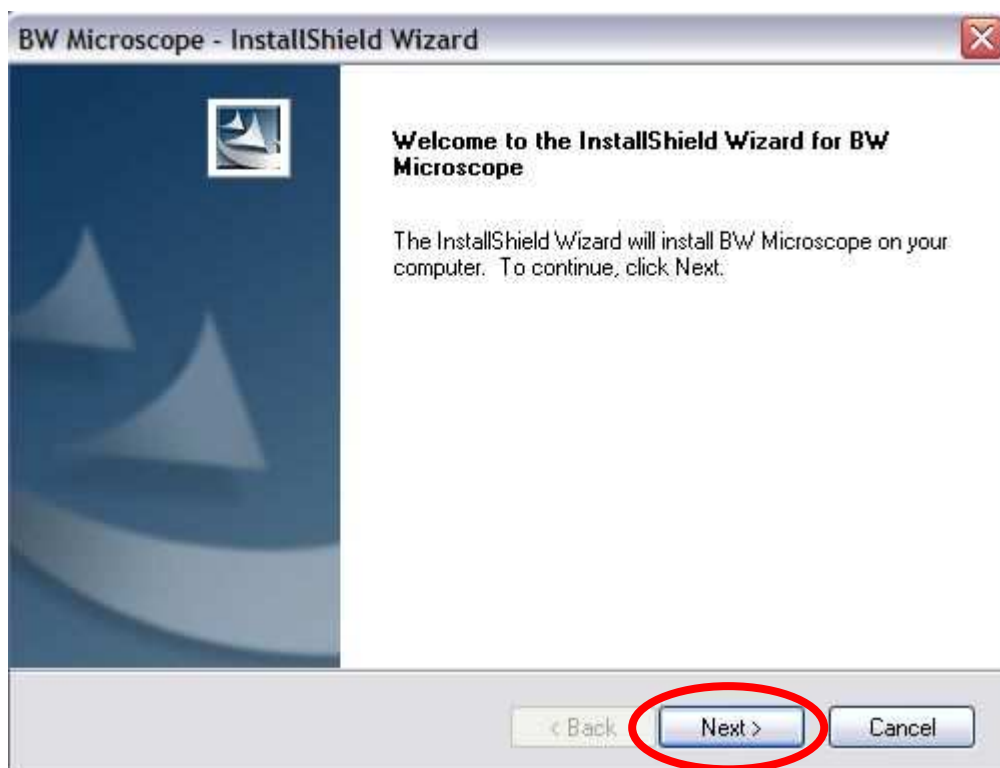
NOTE: If auto run takes times or unable : Please open the file of CD ROM & run "Autorun.exe"



3. Follow the indicators and select “OK”



4. Select “next” to complete this process.



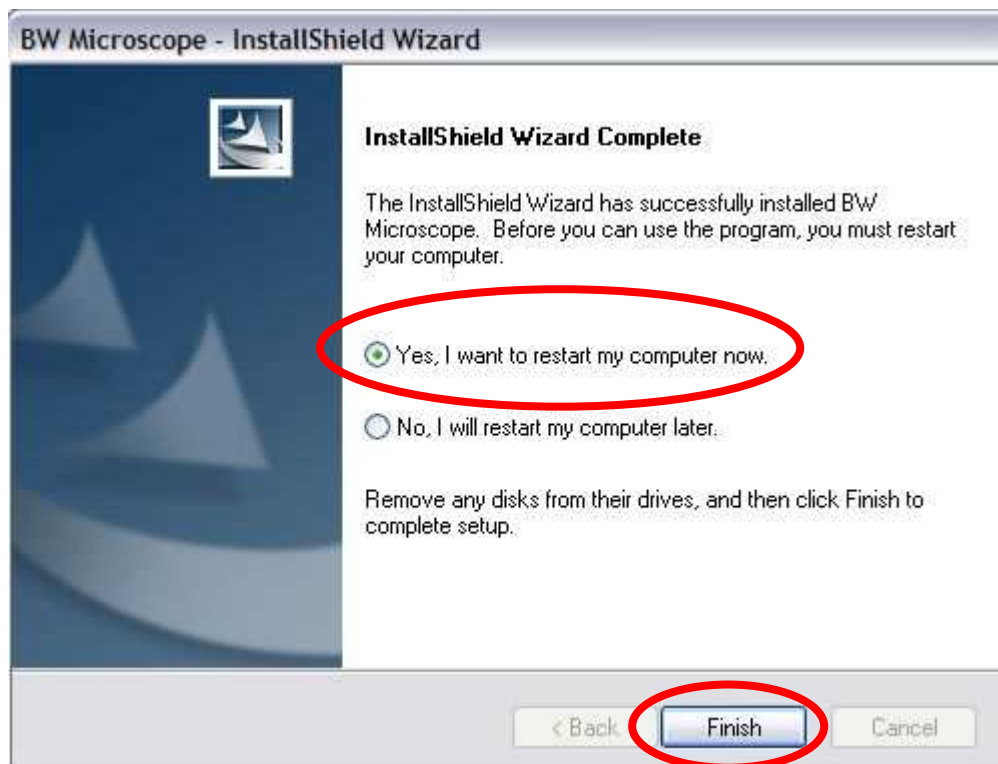
Select "install" to complete this process.



Click "Continue Anyway"



5. Following the user guide by steps, and completed by click "Finish". Computer will restart and get ready .



How to use Digital Micro-measure Camera

1. Plug-in USB port of Digital Micro-measure camera into Computer USB port,

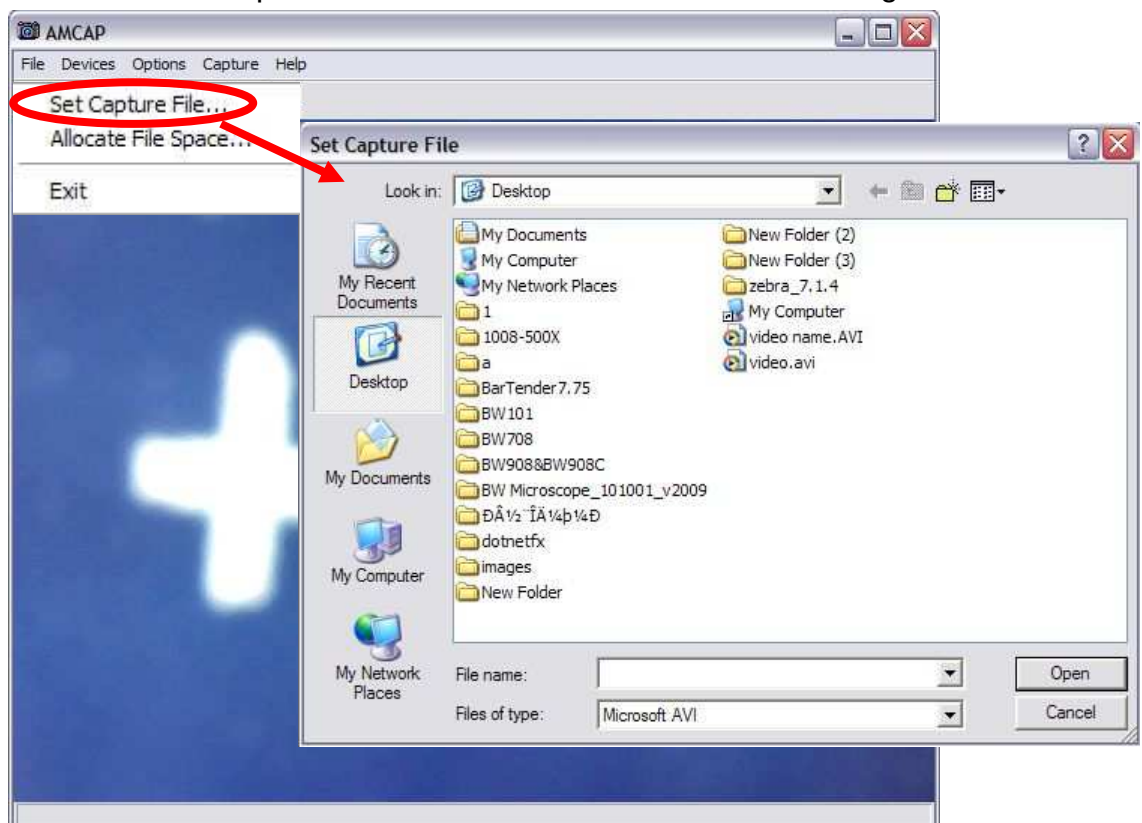


BW

Direct Click **Microscope AP** icon on desk top of computer to start this device.

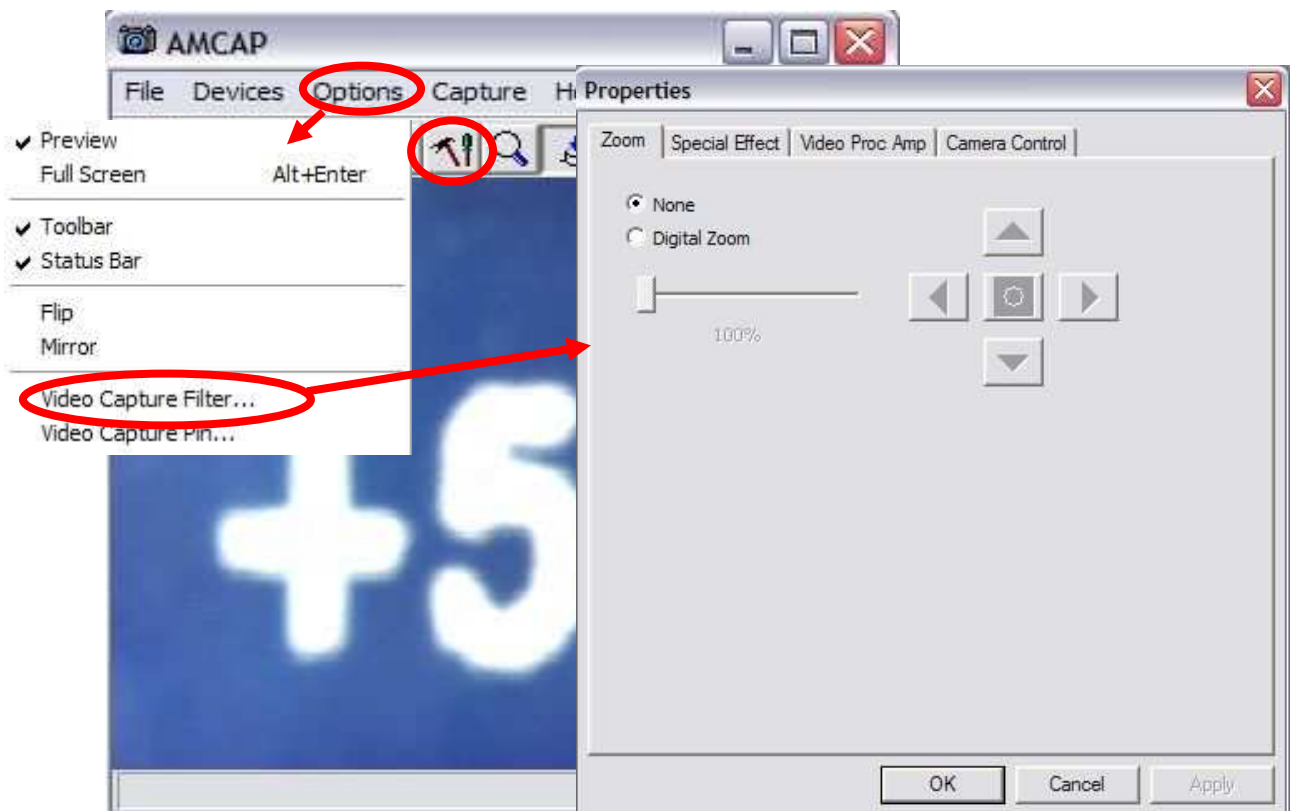


2. Click "File"—> "Set capture file", the saved file name could be assign.

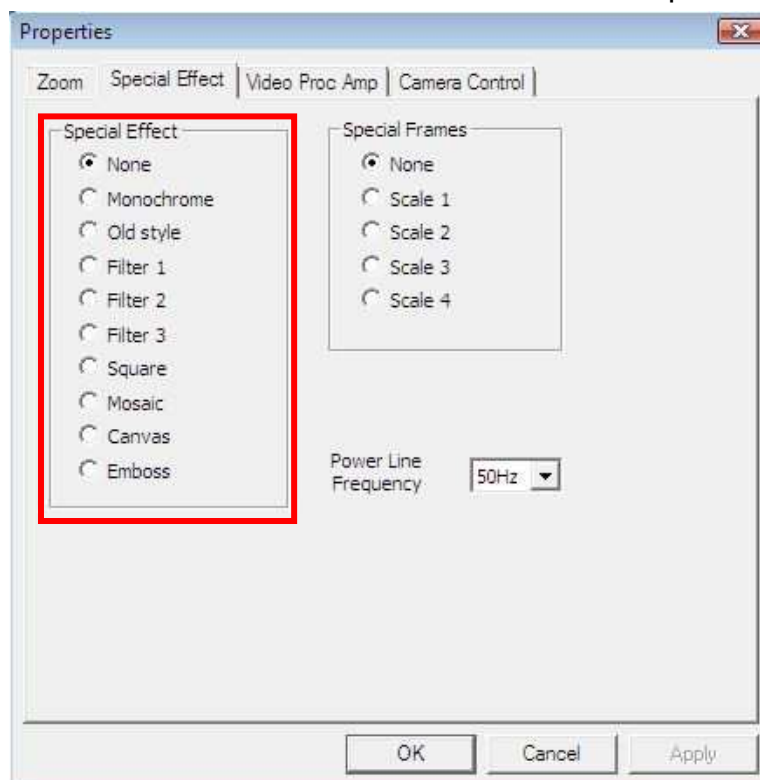


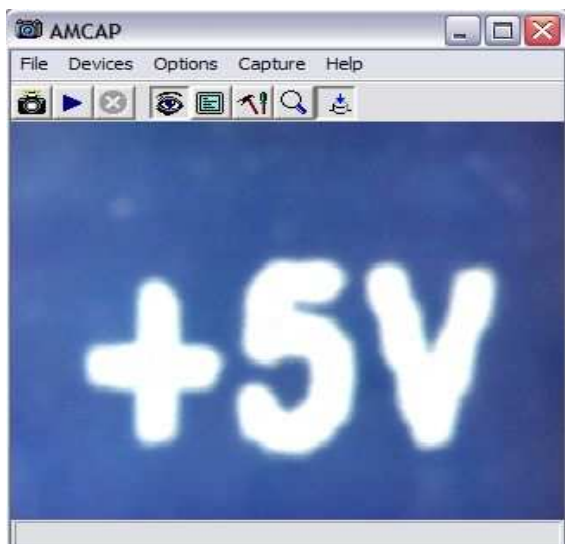
3. Get active the “ review” function under item of option . Click

“Option”—>“Video Capture filter...” .Or Click icon . The Properties showed below:

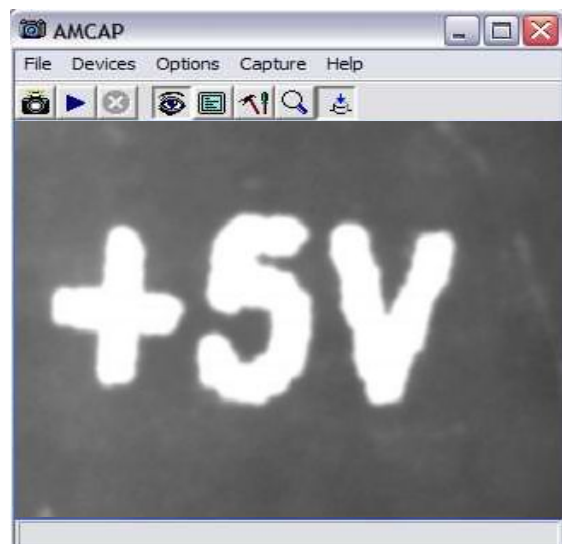


4. Get active the “Zoom”—>“ None” function under item of option. Click “Special Effect”

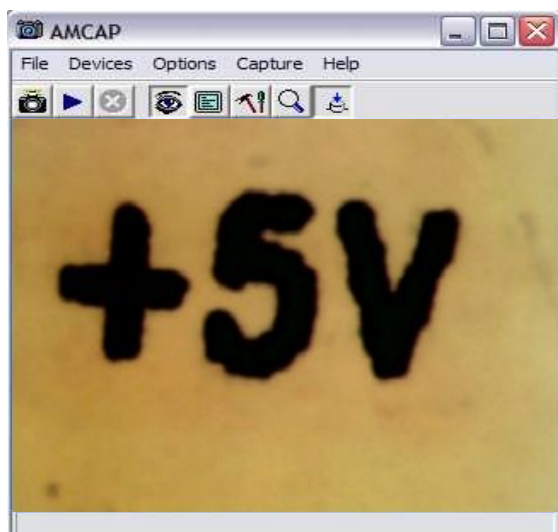




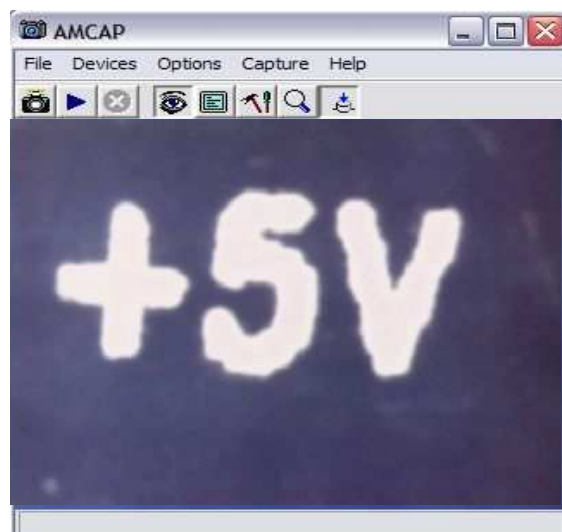
None(Original)



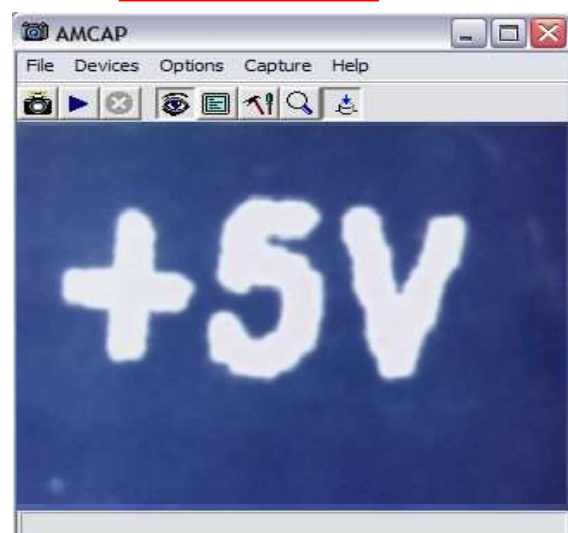
Monochrome



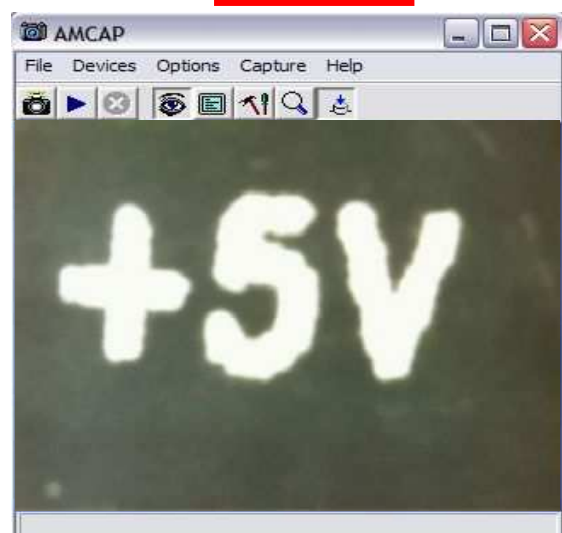
Old style



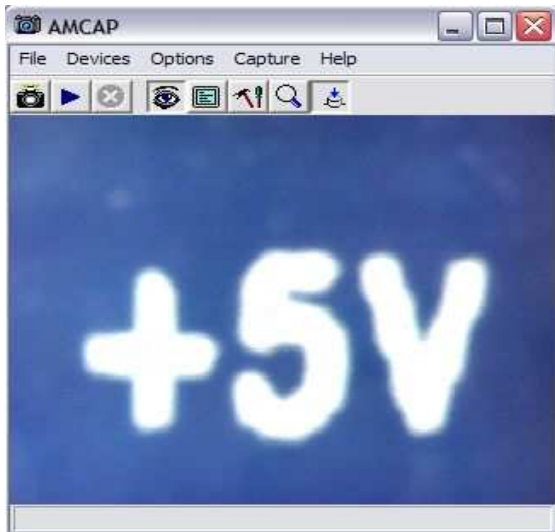
Filter1



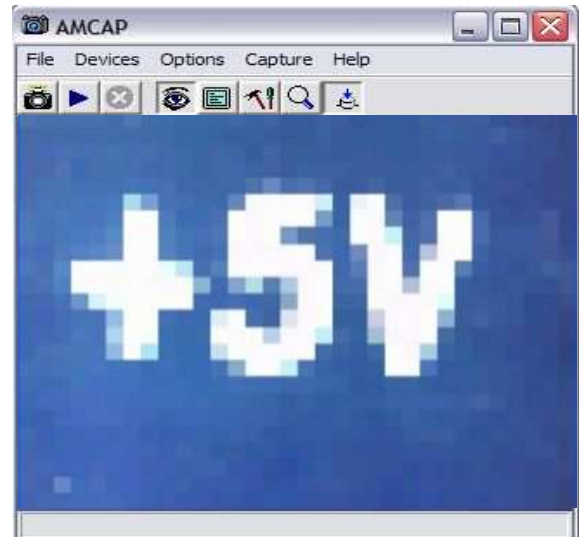
Filter2



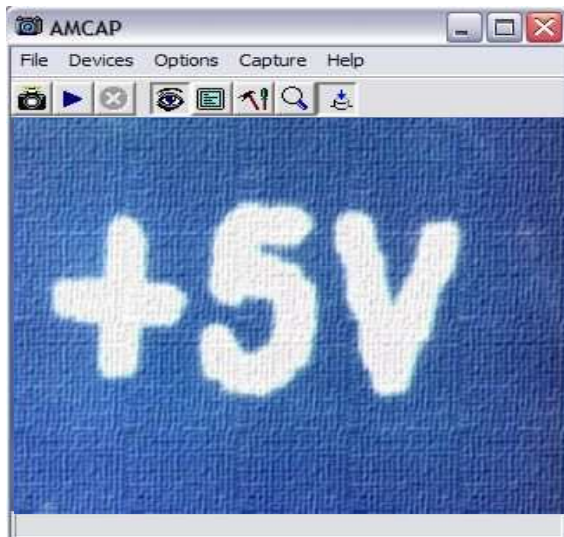
Filter3



Square



Mosaic

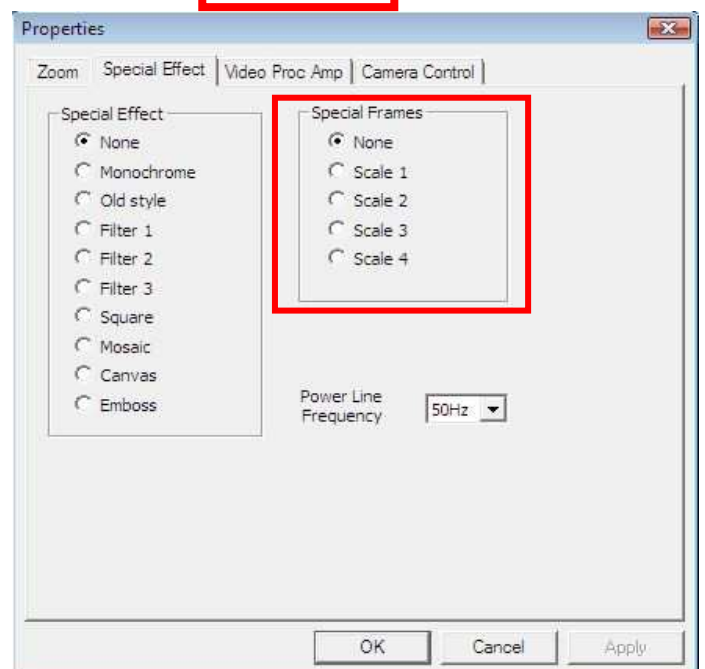


Canvas

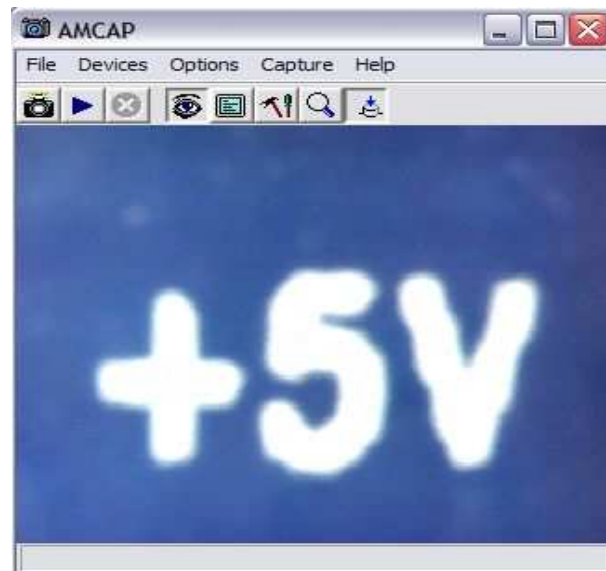


Embos

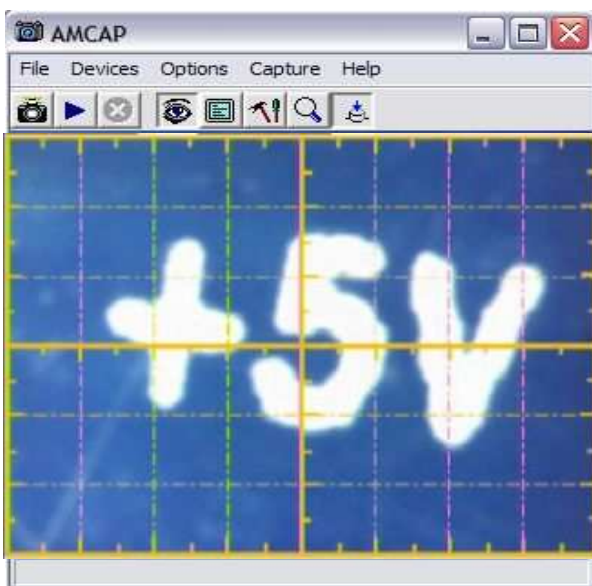
Click "Special Effect" " —> " Special Frames" —>"None"/"Scale1" /"Scale2" /"Scale3" /"Scale4" .



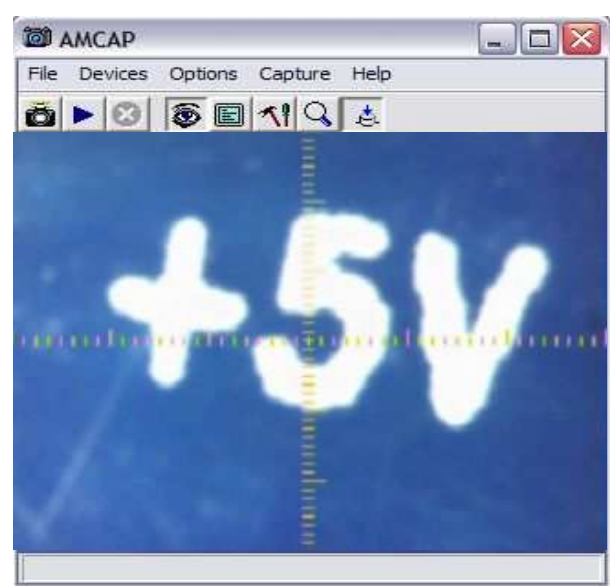
None(Original)



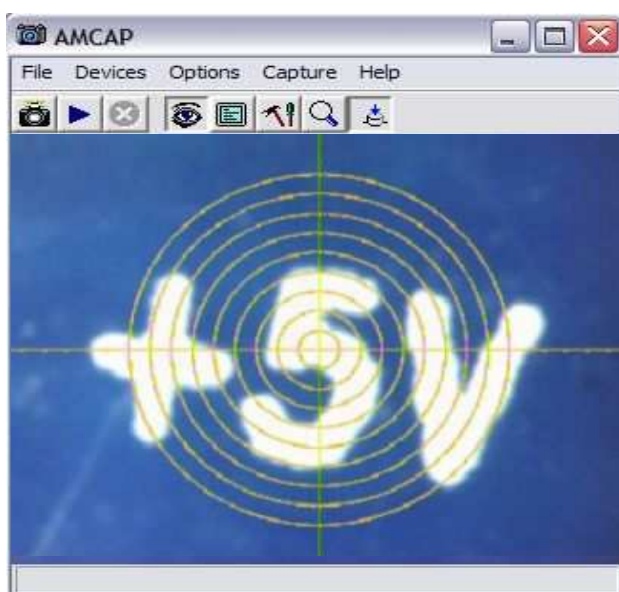
Scale1



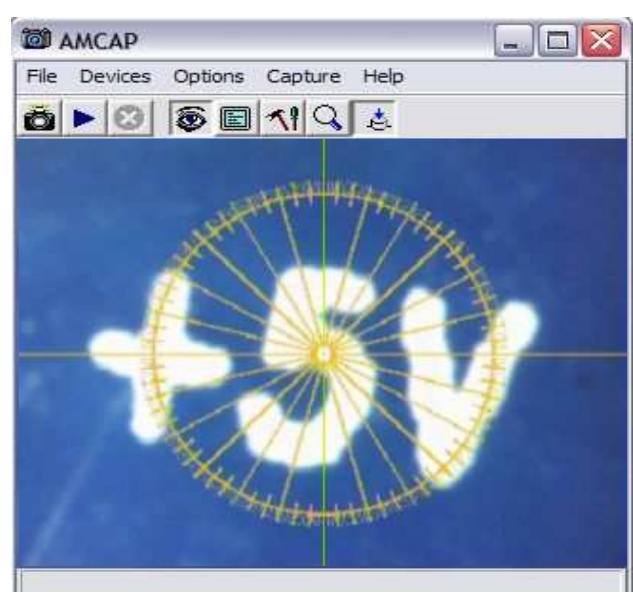
Scale 2



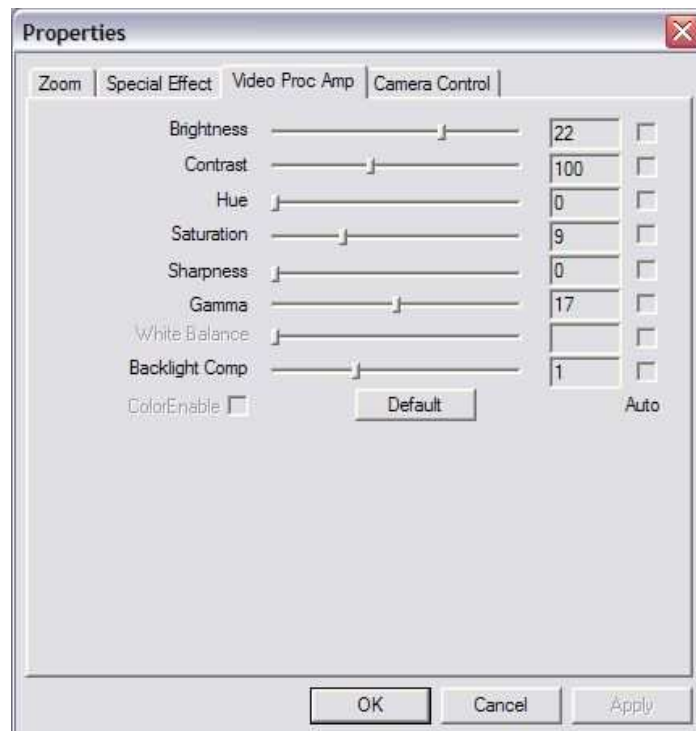
Scale 3



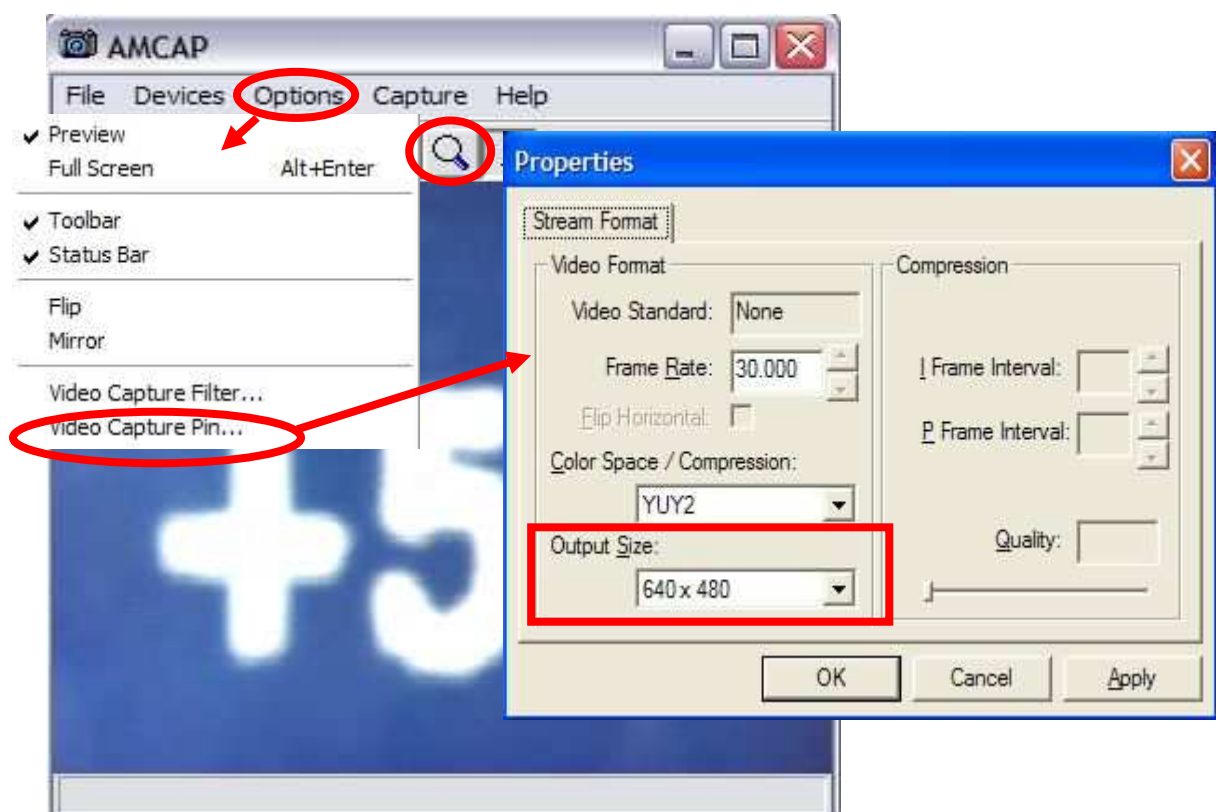
Scale 4



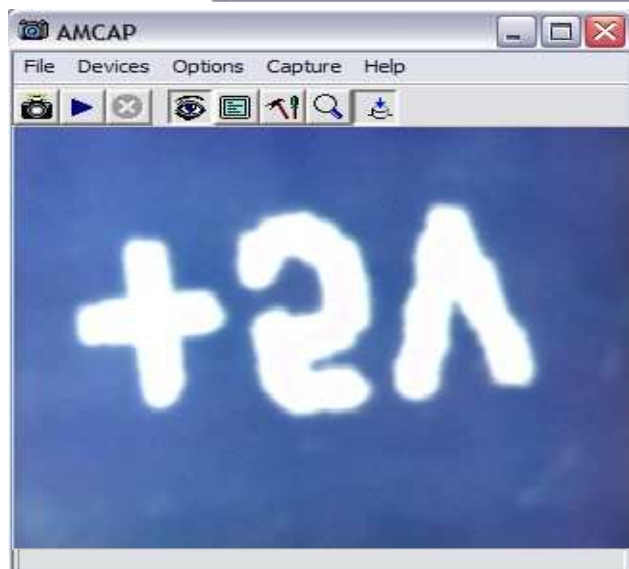
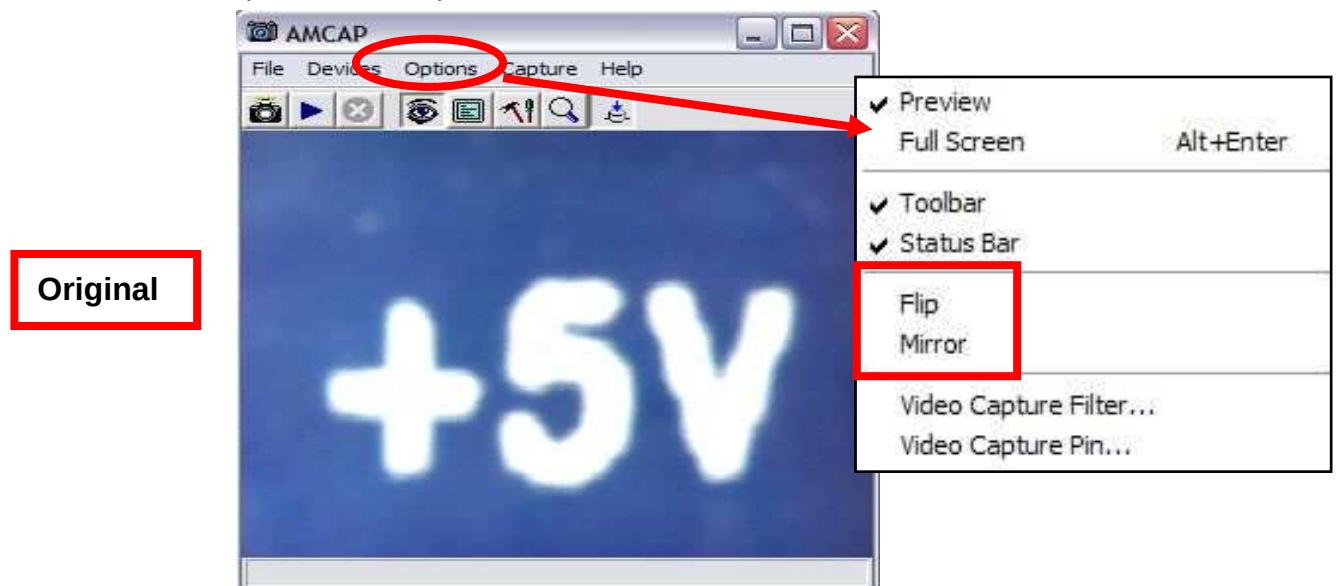
5. Select “Video proc Amp”:
can fine tune the parameters
of image



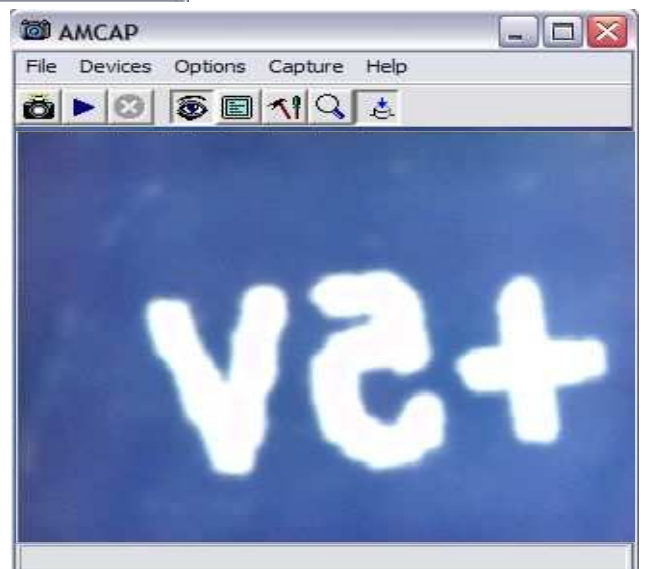
6. Select “Option”——>”Video Capture Filer”, or click icon . The Properties showed below:



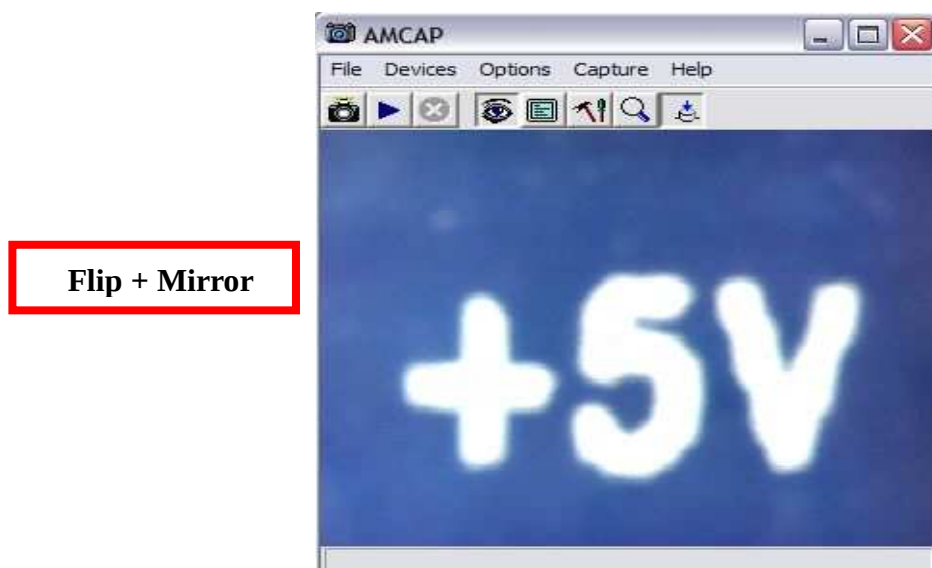
7. Select "Options"—>"Flip"/"Mirror"



Flip

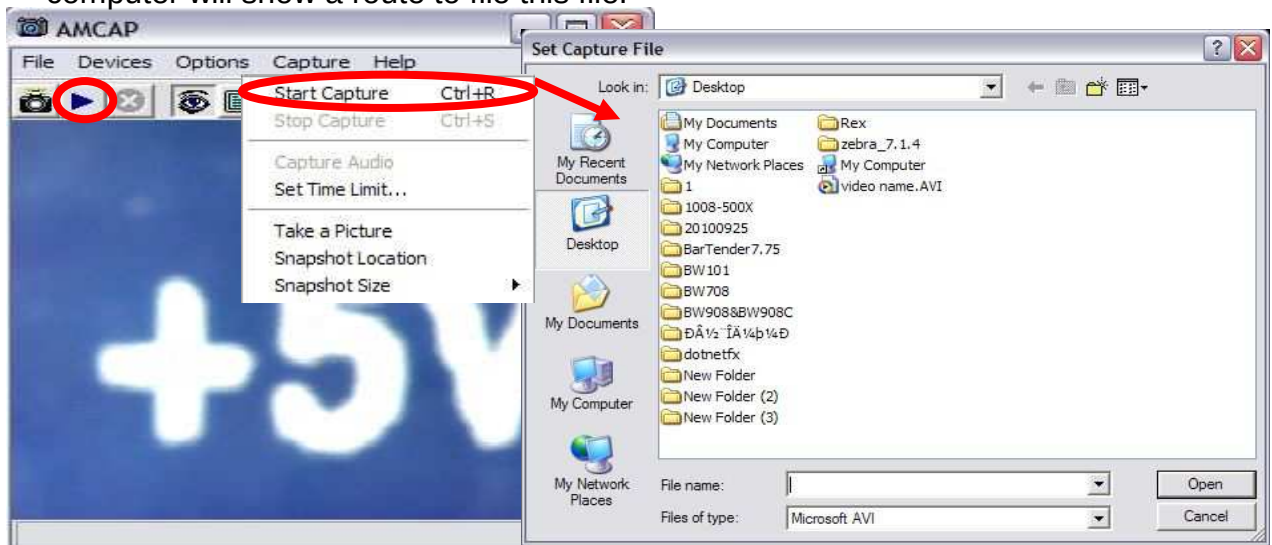


Mirror

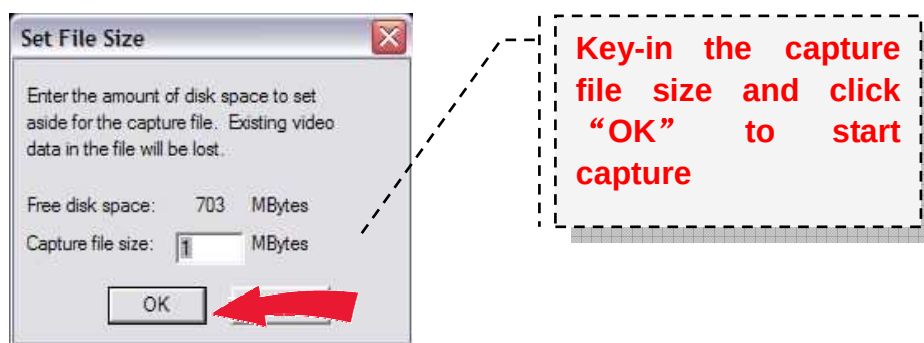


Flip + Mirror

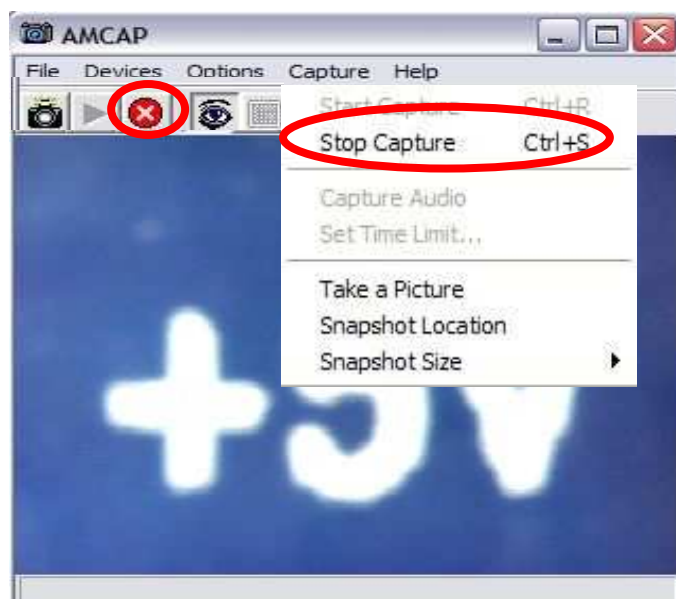
8. Select “Capture”—>“Start Capture”, or click icon  to start capture, computer will show a route to file this file:



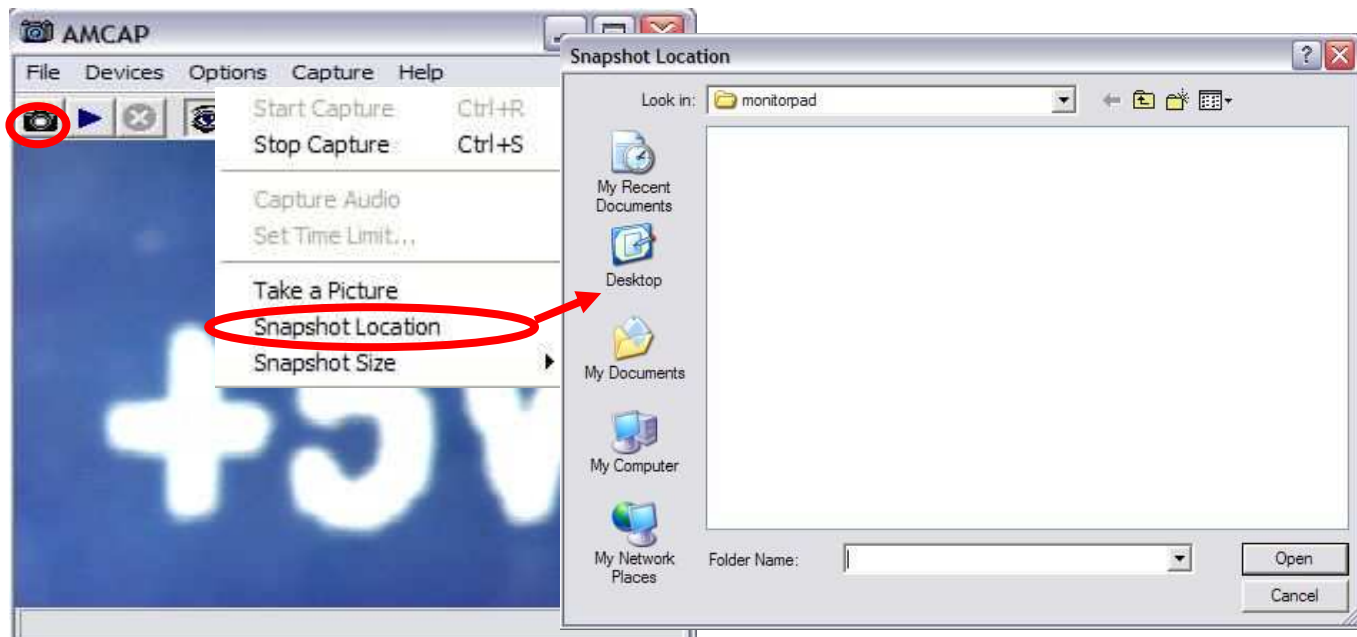
Set file size, the file size could be assign as below:



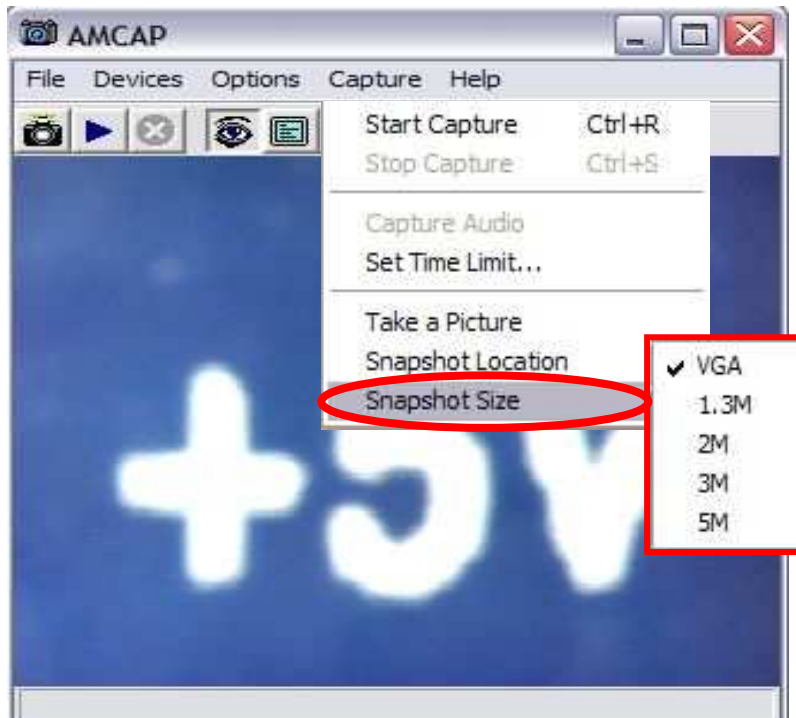
How to stop recording : Find “Capture”—>“Stop Capture”, or click icon  to stop capture.



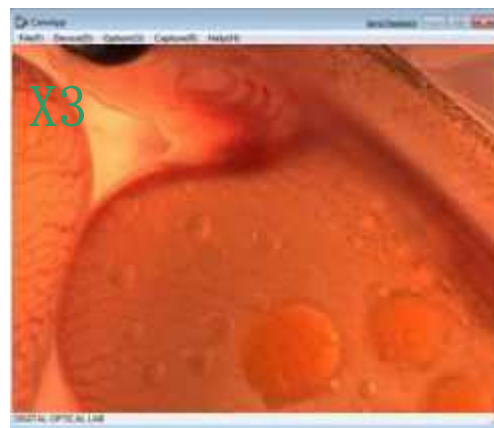
9. Select “Capture”—>“Tack a Picture”, or press bottom ”SNAP” or click icon  to take a photo . Select “Capture”—>“Snapshot Location” to assign the file route as below:



10. Select “Capture”—> “Snapshot size” to change images size:



11. We provide digital zoom function : Please press zoom by sequence to make X1 to X4 zoom effect. **(Note: X1 zoom effect is the Original effect)**

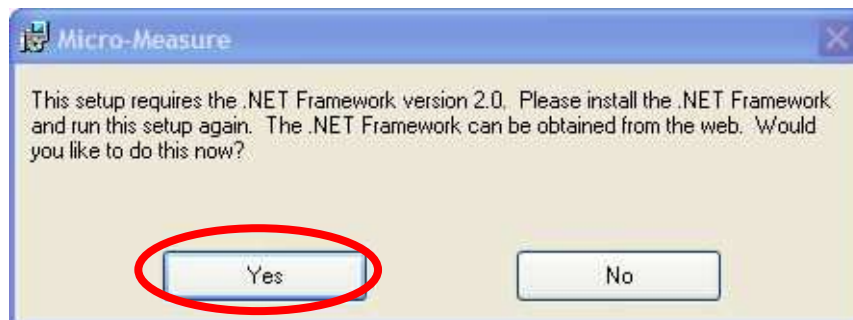


How to install software

1. Insert CD ROM, system will auto come out the interface as bellowing, Click "Micro-Measure-Tool" to start Micro-Measurement Tool program.



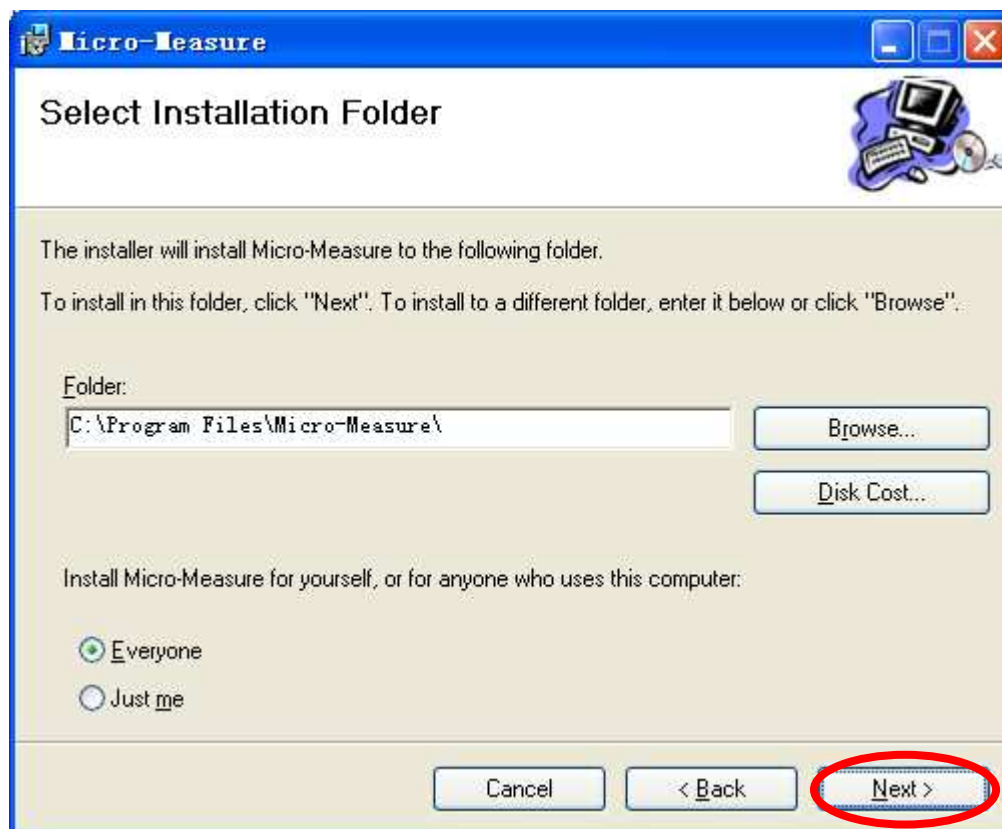
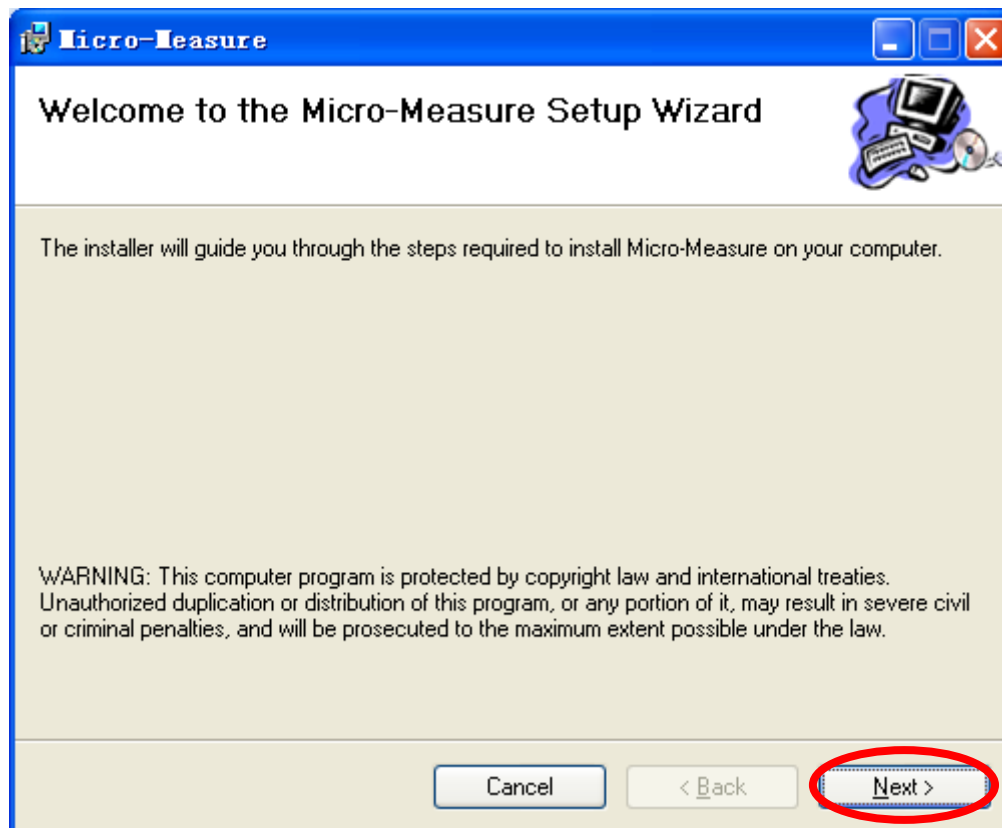
It appears as below if your system asked for Framework version 2.0 before install this software.

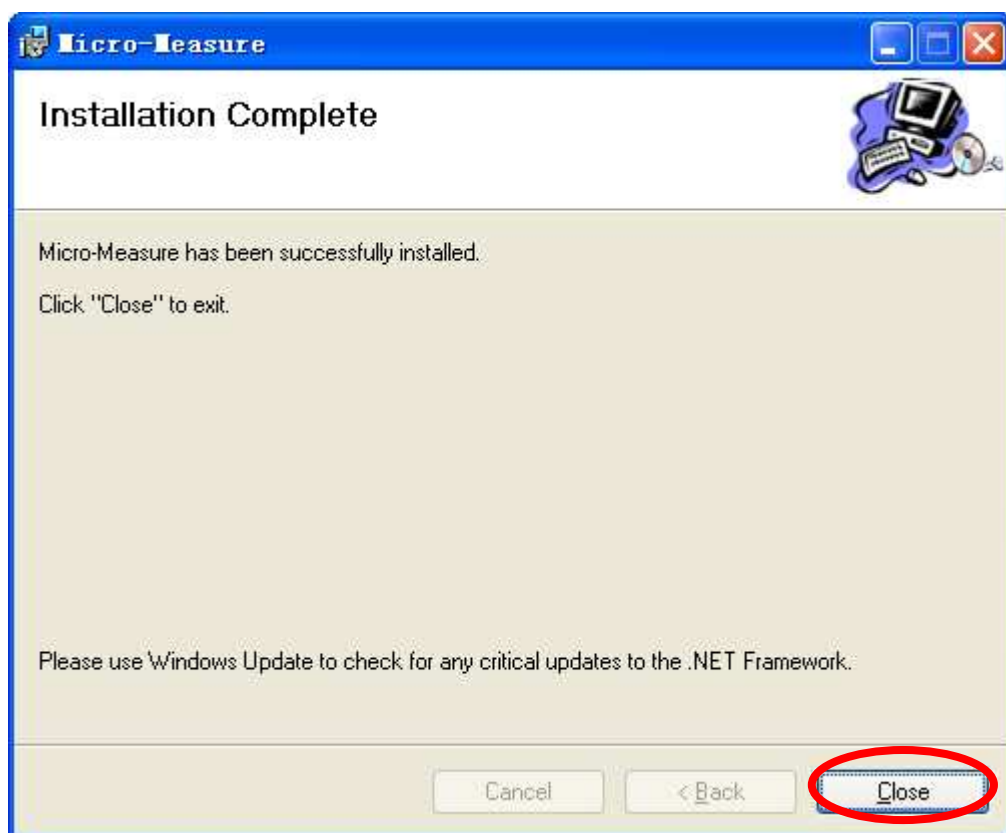
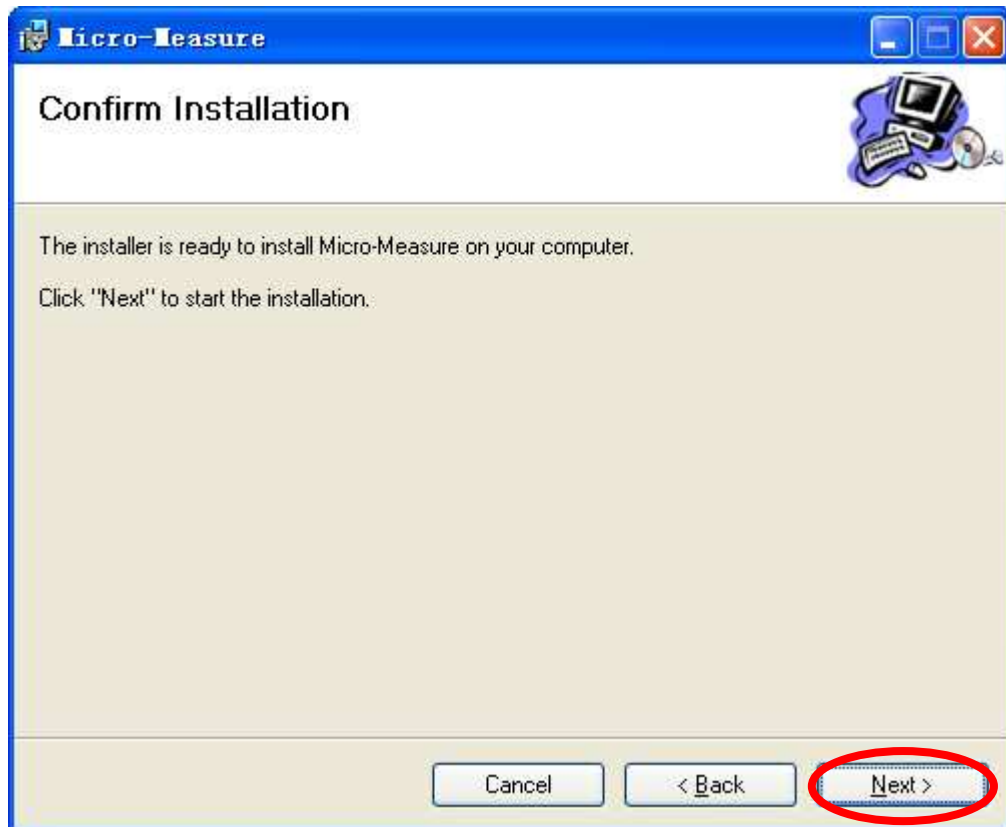


2. Complete Framework 2.0, then click "Micro-Measure-Tool" and start the install process, Interface shows language Selection : please click "English" or "中文版" for Chinese



3. Follow the instructions of computer by press “next”, then complete the install process.





How to do micro-measure

1. Make sure driver has well installed, double click icon

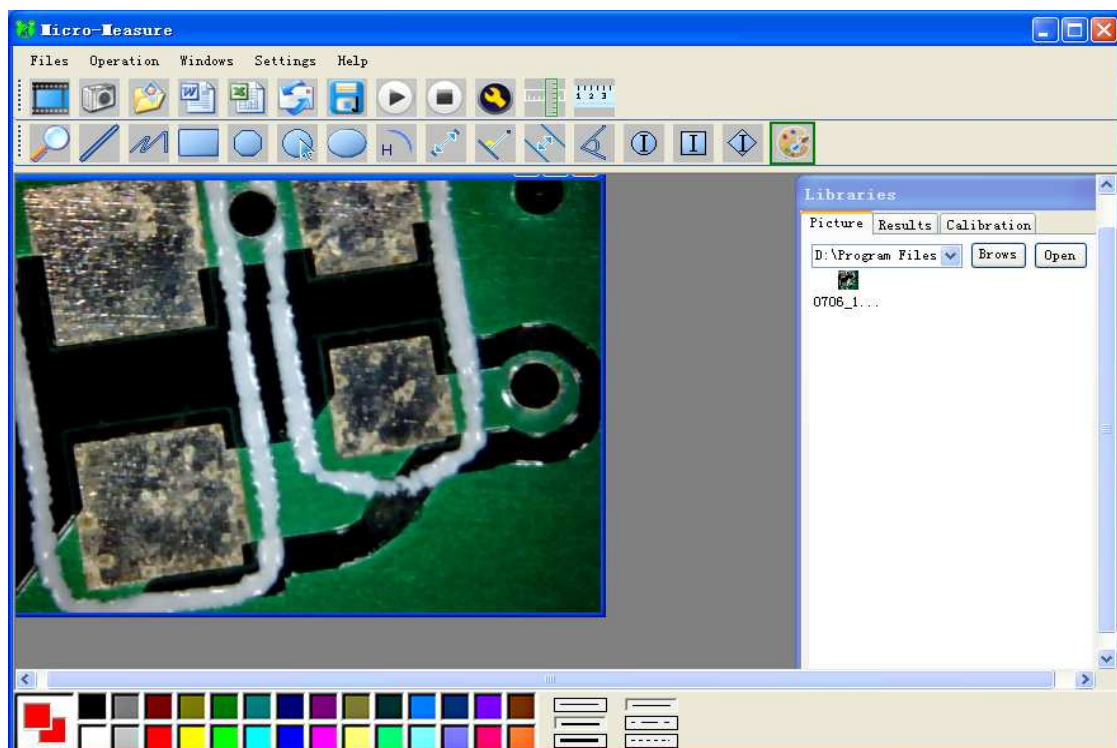


on desk

2. If microscope did not in its ready condition (link to PC & ready for use) ,System will remind you to get ready before use (as below shown):

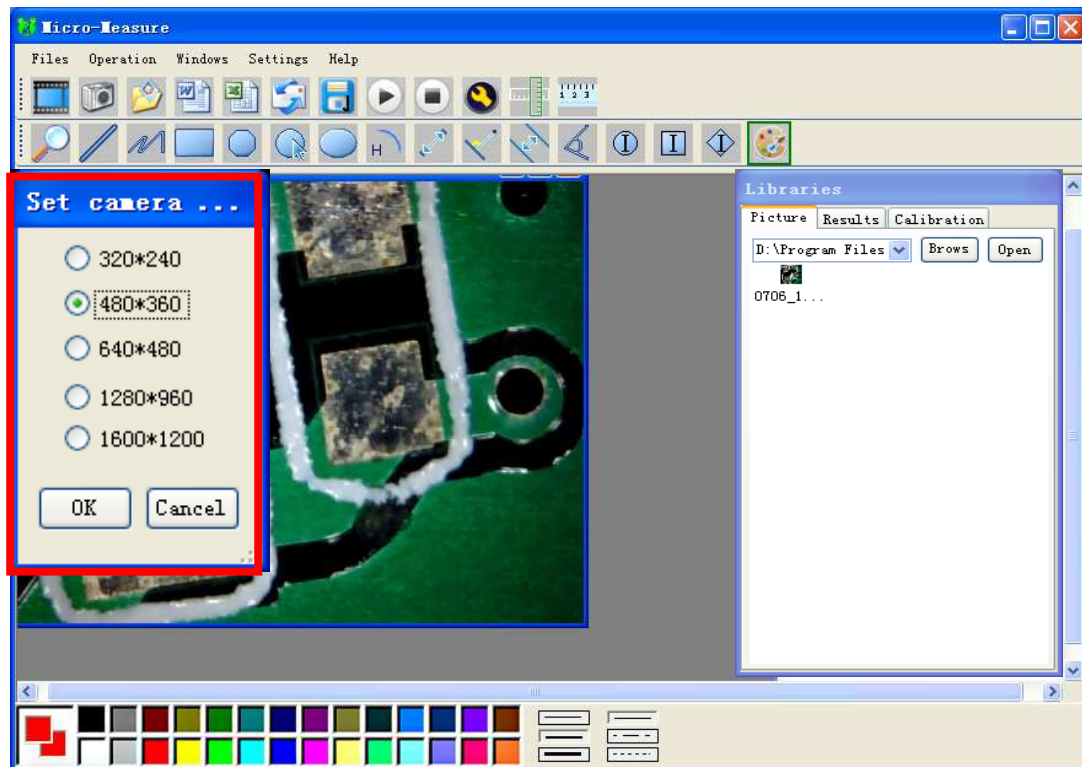


3. Plug – in Microscope, real time display in operation window :

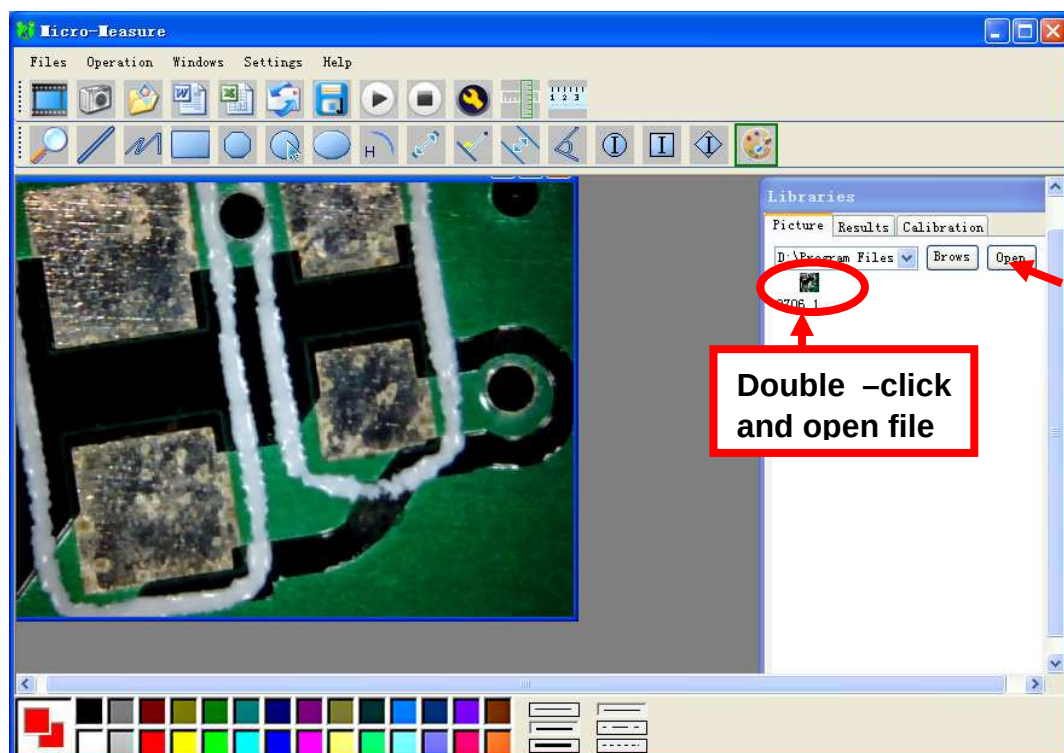


4. The instructions of function options :

Click , open operation system, Choose image resolution from CIF ~ 2M, depend on image quality need. (Default at VGA mode 640 x 480)



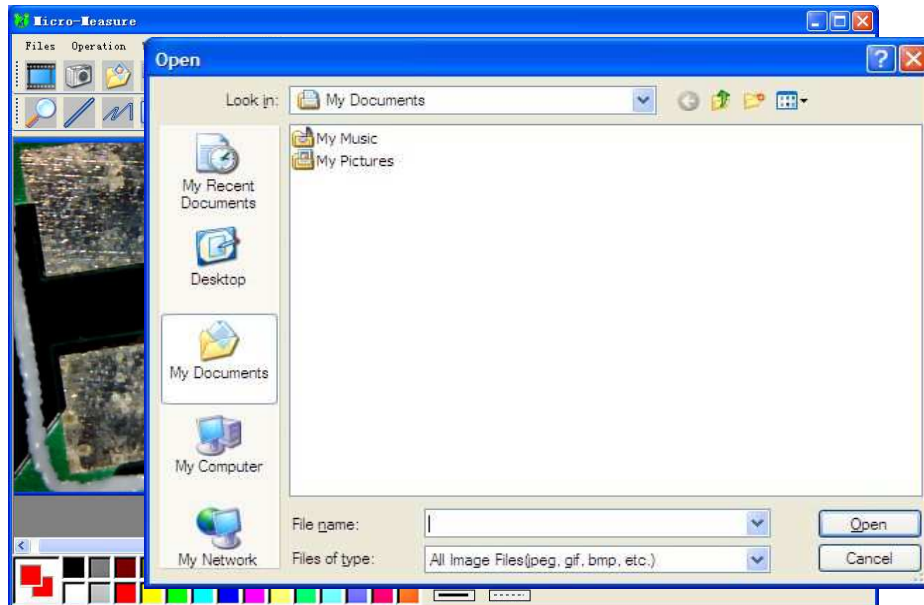
Click SNAP icon  to take pictures as below shown



Double -click
and open file

Open file
and see
the photo

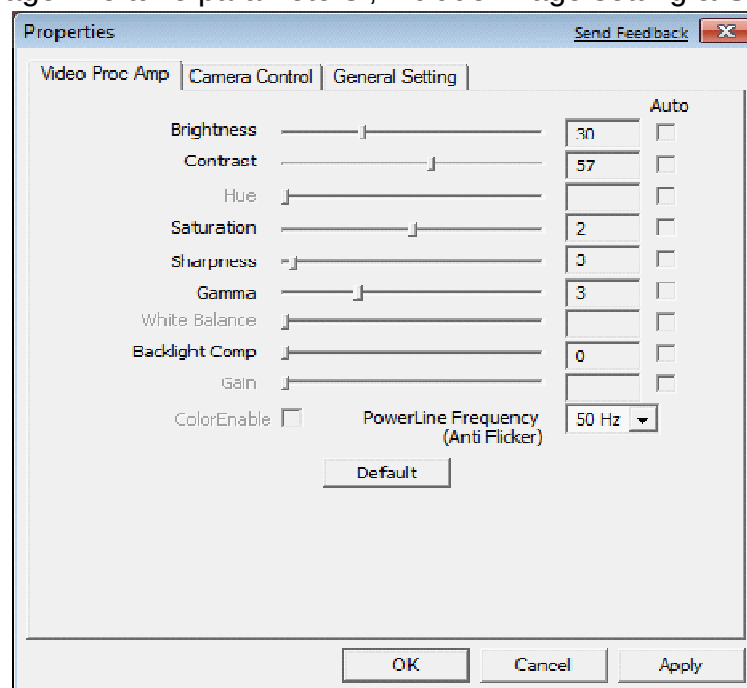
Click icon  to open pictures , and click icon  to save pictures



Video function: from left to right : Play (Pause) ,Stop .



image fine tune parameters , include image setting & Special effects



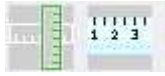
Click
the preview
function stop,
system show



and start
measure.

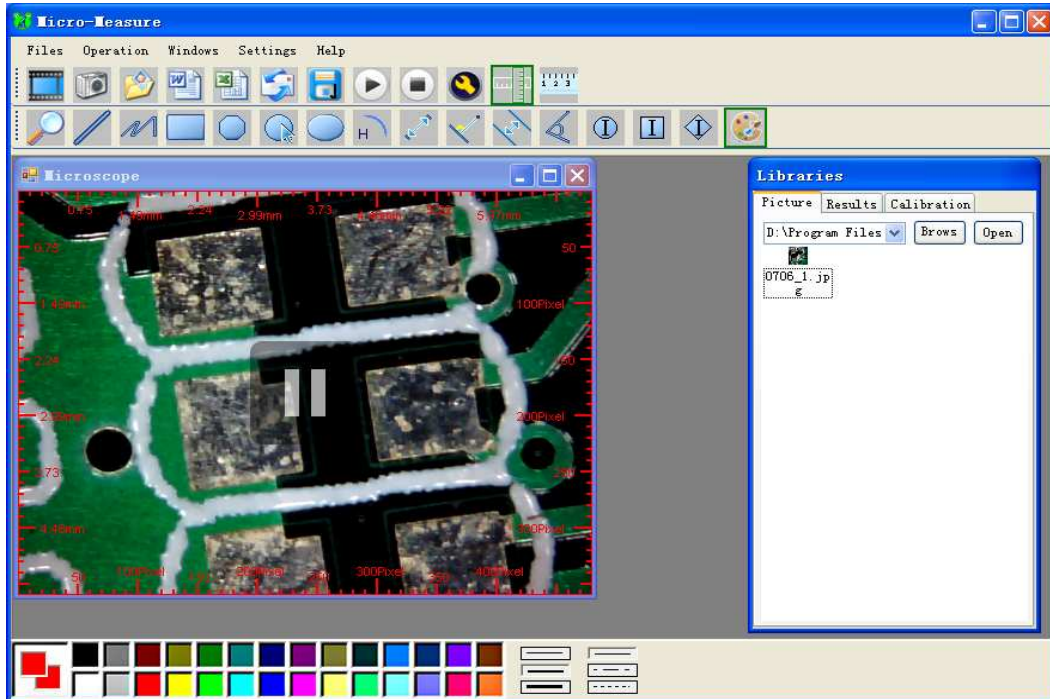


Magnifier

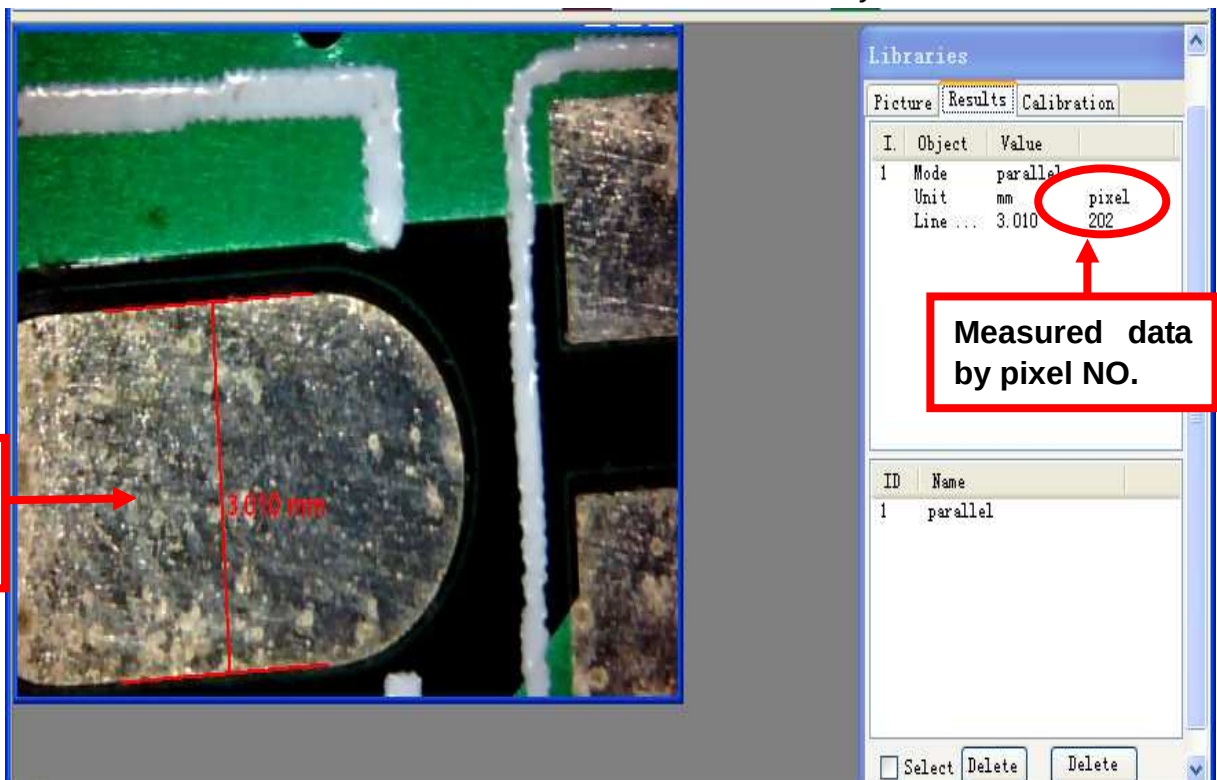


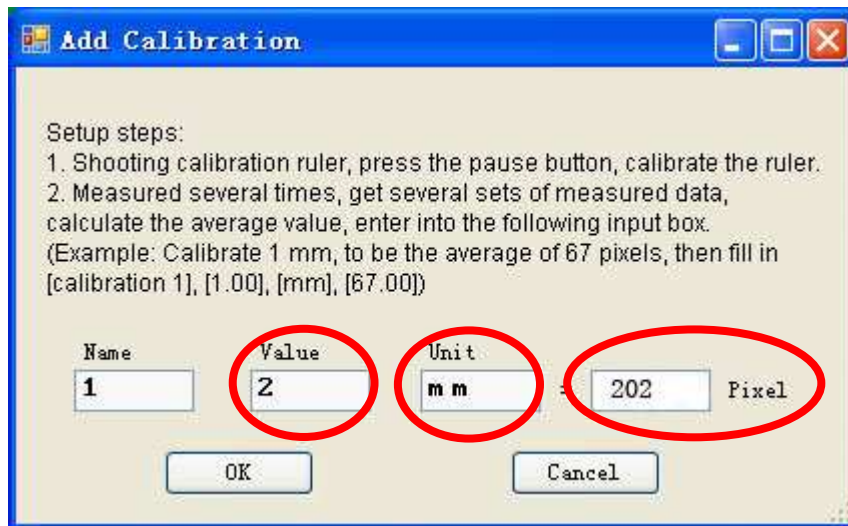
Calibration functions.

① Click , Show as below



② Click , start calibration make sure certain accuracy.

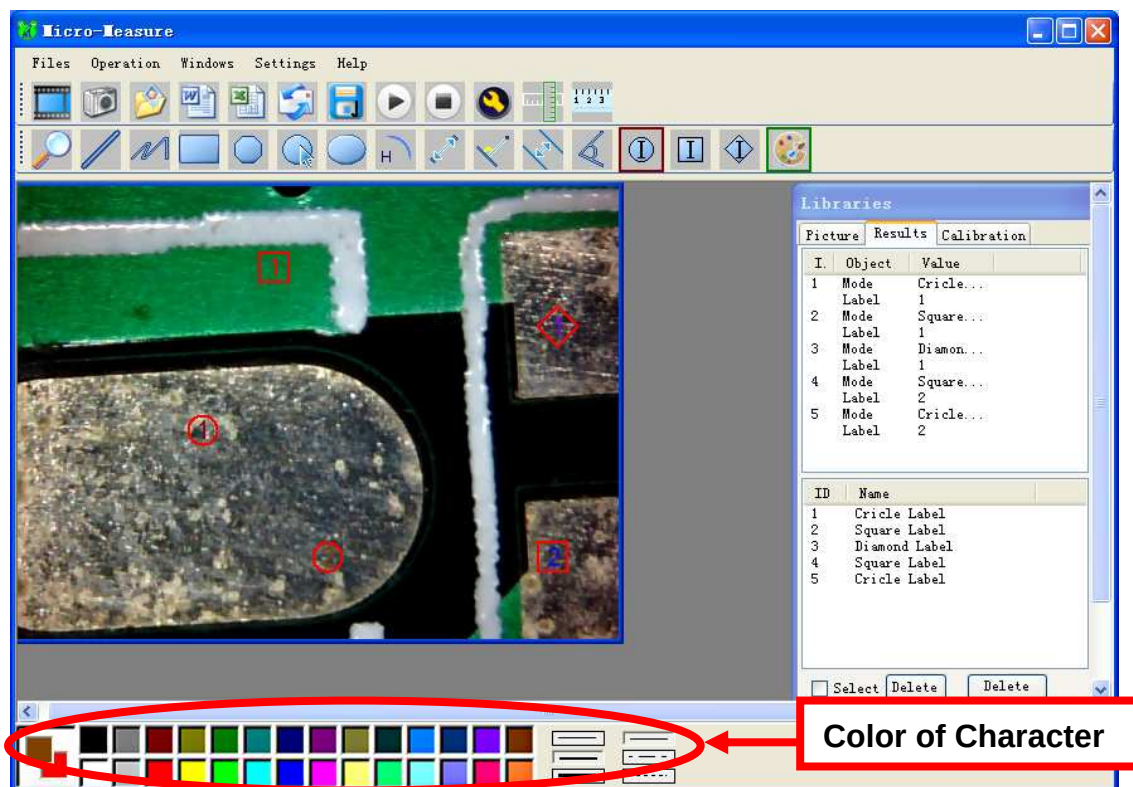




Key-in measure data , unit (mm) and pixel no. then click “OK” .



Color setting of display character





Click to file by WORD format or EXCEL format, you can direct e-mail out by Outlook.

Example : Measure data under Word file.

1 - Microsoft Word

File Edit View Insert Format Tools Table Window Help Type a question for help

Normal + 14 pt Times New Roman 14 B I U

Micro-Measure Output Word

Project: 0707_1.jpg

Time: 2010-07-07 16:10

Data:

Mode	Unit	Line Length
parallel	mm	0.963
parallel	mm	1.493

Picture:

Page 1 Sec 1 1/1 At 1.5" Ln 3 Col 7 REC TRK EXT OVR



measure functions:

From left to right : Length , Set-Line Length.

Square, polygon, ring , oval. (as below shown)

**Drawing
by
mouse**

I.	Object	Value	Calibration
	Radius	0.522	35
	Diameter	1.045	70
	Perim...	3.282	219
	Area	0.857	961
6	Mode	Ellipse	
	Unit	mm	pixel
	Longe...	1.985	133
	Short...	1.224	82
	Perim...	5.017	336
	Area	1.908	8565

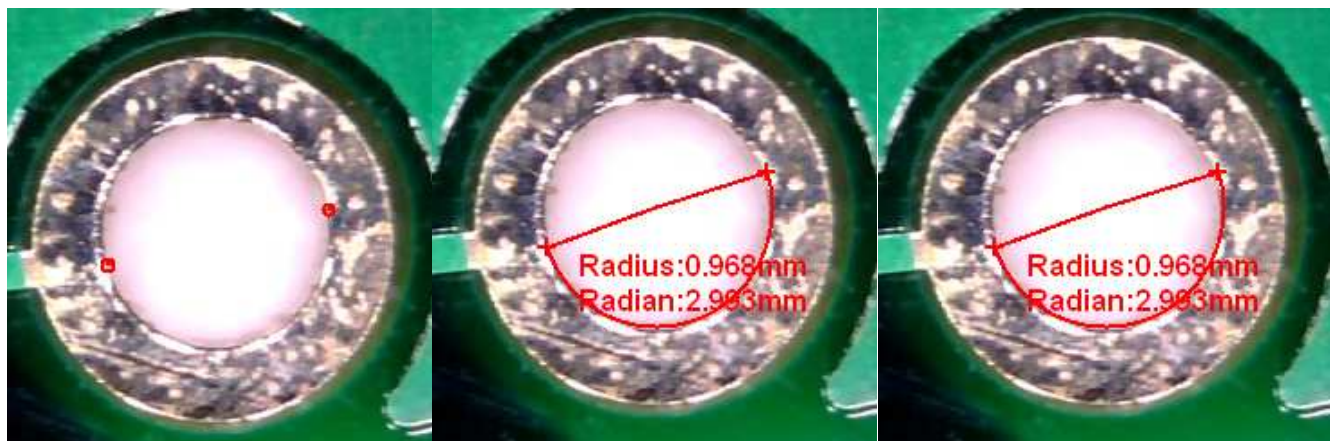
data

**Delete
data**



Arc measurement : include : Arc length , diameter.

Fix the start point & end point on the arc, then fit in the curve by fine tune (Through mouse) curve. (as below shown)



**Select 2 points in the
Arc**

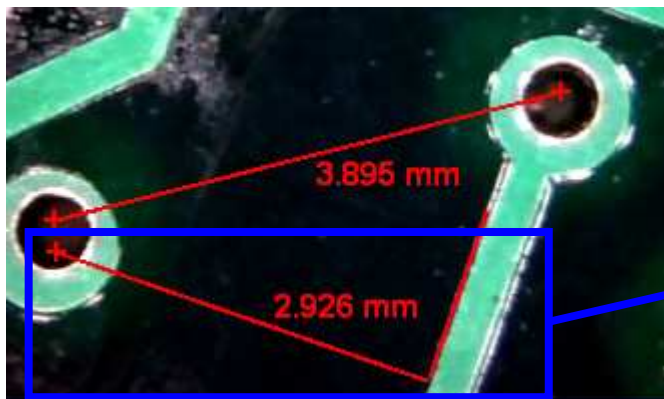
**Fit in Curve by
moving your mouse.**

**Complete measurement
by click left key**



Left : Point to point distance , Right : Point to line distance.

Tips: start :keep press the mouse right key and ended by lease key.



Notes : When measure line to point , be sure to fix line first or it cause fail.



Left : Measure the distance between parallel lines . Right : angle of two lines.



Tips : Find a base line by mouse and move to another line by moving mouse. Measure results will show on screen. (as below shown)



Select 2 points on



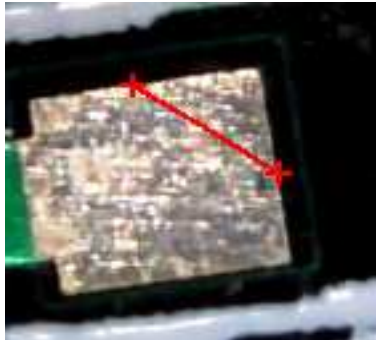
Try to match



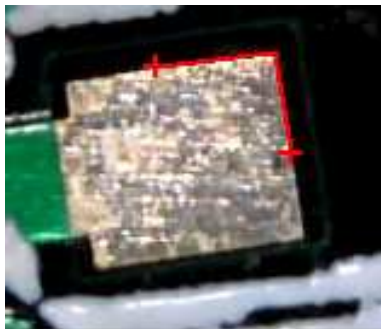
Distance found



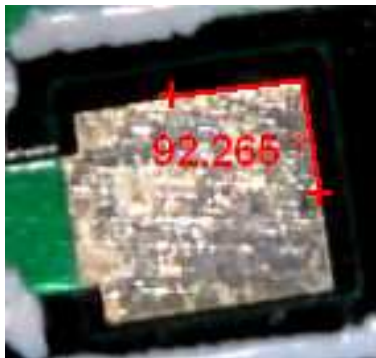
Tips : Find 2 points at right & left side of the angle top, then click the top of angle. Measure result will display. (as below shown)



2 points selected



Moving to the top of angle



Confirmed & click

Q & A

Q Why pre-view disable?

- A
- 1 No driver installed.
 - 2 LED did not on (Lighting);
 - 3 Re-boot Camera.

Q Ill measure accuracy?

- A
- 1 Re-calibration
 - 2 Fine-tune focus

Q How to un-install software?

- A Depart the micro-measure camera from PC.
- 1 Find the program file in system, click “un-install”。
 - 2 [Start]>[Program]>[Digital Microscope]>[Uninstall]
[Start]>[Program]>[Micro-Measure]>[Uninstall]

Q Micro-measure Software un-work?

- A
- 1 Check the connection is workable .
 - 2 Check the software and re-start the program.